WHAT IS CLAIMED IS:

1. A card type device connected to an electronic appliance, comprising:

a card type housing having a connection terminal used to be connected to said electronic appliance;

a transparent cylindrical-shaped roller provided at an edge plane of said card type housing, the outer peripheral plane of which is projected from said edge plane;

a one-dimensional image sensor provided inside said roller, for acquiring one-dimensional fingerprint image data of a finger which abuts against the outer peripheral plane of said roller;

fingerprint data synthesizing means for synthesizing two-dimensional fingerprint data from the one-dimensional fingerprint image data which are continuously acquired from said one-dimensional image sensor by rotating said roller by moving the finger abutting against the outer peripheral plane of the roller; and

an interface unit for transmitting/receiving data via said connection terminal between the own card type device and the electronic appliance.

2. A card type device as claimed in claim 1 wherein:

said housing is further comprised of an insertion portion which is inserted into a card slot provided on said electronic appliance, and on which said connection terminal is arranged; and

said roller is provided on an edge portion of the housing

which is exposed from an insertion port of said card slot.

3. A card type device as claimed in claim 2, further comprising:

control means for identifying as to whether or not said fingerprint data synthesized by said fingerprint data synthesizing means is made coincident with fingerprint data which has been previously registered, and for outputting an identification result to said electronic appliance.

4. A card type device as claimed in claim 2, further comprising:

encrypting means for encrypting said fingerprint data based upon a secret encryption key which is specific to said card type device.

5. A card type device as claimed in claim 4 wherein:

said encrypting means is assembled in an LSI (large-scaled integration) chip having an tamper resistant characteristic.

6. A card type device as claimed in claim 1 wherein:

said connection terminal owns a structure made based upon the USB (universal serial bus) standard.

7. An identification system arranged by connecting an electronic appliance to a card type device, wherein:

said card type device is comprised of:

a card type housing having a connection terminal;

a transparent cylindrical-shaped roller provided at an edge plane of said card type housing, the outer peripheral plane of which is projected from said edge plane;

a one-dimensional image sensor provided inside said roller, for acquiring one-dimensional fingerprint image data of a finger which abuts against the outer peripheral plane of said roller;

fingerprint data synthesizing means for synthesizing two-dimensional fingerprint data from the one-dimensional fingerprint image data which are continuously acquired from said one-dimensional image sensor by rotating said roller by moving the finger abutting against the outer peripheral plane of the roller; and

an interface unit for transmitting/receiving data via said connection terminal between the own card type device and the electronic appliance; and wherein:

said electronic appliance is comprised of:

a control unit for identifying as to whether or not said fingerprint data transmitted from said card type device is made coincident with previously-registered fingerprint data, and for restricting operation of said electronic appliance in the case that said control unit judges that said transmitted fingerprint data is not made coincident with said previously-registered fingerprint data.

8. An identification system as claimed in claim 7 wherein:

said electronic appliance includes a card slot used to mount the card type device;

a housing of said card type housing is further comprised of an insertion portion which is inserted into said card slot provided on said electronic appliance, and on which said

connection terminal is arranged; and

said roller is provided on an edge portion of the housing which is exposed from an insertion port of said card slot.

9. An identification system as claimed in claim 8 wherein:

said card type device is further comprised of:

encrypting means for encrypting said fingerprint data based upon a secret encryption key specific to said card type device; and

said electronic appliance is further comprised of:

decrypting means for decrypting the encrypted fingerprint data which is transmitted from said card type device based upon a public decryption key corresponding thereto.

10. An identification system as claimed in claim 8 wherein:

said electronic appliance corresponds to an electronic appliance having a wireless communication function, which performs fingerprint identification when user identification required in an electronic commercial transaction using a network is carried out.

11. An identification system as claimed in claim 8 wherein:

said card type device is further comprised of:

control means for identifying as to whether or not said fingerprint data synthesized by said fingerprint data synthesizing means is made coincident with fingerprint data which has been previously registered, and for outputting an identification result to said electronic appliance; and

said electronic appliance controls a function to be

executed based upon the identification result.

12. A card type device comprising:

a card type housing;

a transparent cylindrical-shaped roller provided at an edge plane of said card type housing, the outer peripheral plane of which is projected from said edge plane;

a light source provided in an internal hollow portion of said roller, for irradiating a finger which abuts against the outer peripheral plane of said roller;

a one-dimensional image sensor provided in said internal hollow portion of said roller, for acquiring one-dimensional fingerprint image data of the finger which abuts against the outer peripheral plane of said roller;

a SELFOC lens array provided in said internal hollow portion of said roller, for focusing a one-dimensional image of the finger which abuts against the outer peripheral plane of said roller onto said one-dimensional image sensor; and

a holder for holding thereon said light source, said one-dimensional image sensor, and said SELFOC lens array, which is fixed to said card type housing in such a manner that even when said roller is rotated, said holder is not rotated.

13. A card type device as claimed in claim 12, further comprising:

fingerprint data synthesizing means for synthesizing two-dimensional fingerprint data from the one-dimensional fingerprint image data which are continuously acquired from

said one-dimensional image sensor by rotating said roller by moving the finger abutting against the outer peripheral plane of the roller.

14. A card type device as claim in claim 12 wherein:

said SELFOC lens array is constituted in such a manner that a plurality of SELFOC lenses having center axes which are intersected perpendicular to a roller center of said roller are arrayed.

15. A card type device as claimed in claim 12 wherein:

said card type housing is provided with a connection terminal used to connect said card type device to an electronic appliance.

16. A card type device as claimed in claim 13 wherein:

said housing is further comprised of an insertion portion which is inserted into a card slot provided on said electronic appliance, and on which said connection terminal is arranged; and

said roller is provided on an edge portion of the housing which is exposed from an insertion port of said card slot.

17. A card type device as claimed in claim 16, further comprising:

control means for identifying as to whether or not said fingerprint data synthesized by said fingerprint data synthesizing means is made coincident with fingerprint data which has been previously registered, and for outputting an identification result to said electronic appliance.

18. A card type device as claimed in claim 13, further

comprising:

encrypting means for encrypting said fingerprint data based upon a secret encryption key which is specific to said card type device.

19. A card type device as claimed in claim 18 wherein:

said encrypting means is assembled in an LSI (large-scaled integration) chip having an tamper resisrant characteristic.

20. A card type device as claimed in claim 15 wherein:

said connection terminal owns a structure made based upon the USB (universal serial bus) standard.